ABSTRACT: A facial vibratable mask device constructed to cover and contact side facial areas and chin areas with a smooth, soft, resilient, foamlime material within which is fully embedded vibratable means for imparting vibrations to such facial areas through the soft material. Means for holding the mask device in covering relation to a face to be treated includes a strap passing behind the neck and provided with a vibratable unit for vibrating back neck portions. A vibratable mask device which is resistant to oils, facial cream, nonallergic, nontoxic, resistance to heat, and is a nonconductor of electricity.
VIBRATORY FACIAL MASK

BACKGROUND OF INVENTION

In the treatment of facial areas to improve skin complexion, tone, texture and firmness it has been desirable to subject facial areas to massage and to vibrations imparted thereto by vibratable, mechanical or electrically driven devices. Such prior proposed vibratable devices have usually been hand held and included a vibratable shoe or surface which was applied to a relatively small area, as for example, only a portion of the surface of a cheek. Such a prior proposed vibratable device was required to be manually moved over facial areas to be subjected to vibration. Often to provide a desired length of treatment for each area an overall time period of considerable length would elapse. Moreover, some of prior proposed devices did not permit convenient, sanitary, and thorough cleaning of the vibrating surface which came in contact with the skin, and thus, such surfaces often became contaminated and soiled with facial oils and various cosmetic preparations. Such contaminated vibratable surfaces were objectionable and did not afford the desired stimulating and cleansing effect.

The present invention contemplates a novel means for treating or subjecting facial areas to massagelike vibrations by an effective simple operable readily cleanable and sterilizable vibratable mask device. The present invention contemplates that such a vibratable mask means is constructed and arranged with a selected configuration or shape so that normally fleshy parts of facial configurations, such as the cheek and chin areas are subjected to vibratory pulses simultaneously so that a major portion of the facial area is treated by the device of the present invention. The present invention also contemplates that the vibratory facial mask device may be worn for treatment by a person while engaging in other activities. The facial mask of the present invention is readily adjustable to faces of different width and facial contours so that vibratory impulses may be effectively transmitted to the fleshy facial areas being treated.

It is therefore the primary object of this invention to disclose and provide a novel means for simultaneously treating several facial areas with a single vibratory device.

An object of the present invention is to disclose and provide a facial masking device which includes one or more vibratory units for imparting vibrations to a soft skin contacting portion of the masking device for transmission of said vibrations to selected fleshy areas on the face of a person being treated.

Another object of the present invention is to disclose and provide a facial mask device in which a soft, foamy, resilient material is contained within a rigid, thin outer shell which is yieldable to comfortably conform to various facial configurations.

A further object of the present invention is to disclose and provide a vibratable facial mask device in which vibrating units are embedded within a soft, resilient material and are completely insulated and isolated so that the mask device may be readily cleaned and sanitized by subjecting it to various types of cleaning preparations and heat without damaging the vibrating units or mask device.

A still further object of the invention is to disclose and provide a vibratable facial mask employing a vibrating unit opposite each cheek portion and a chin portion of a person being treated.

A still further object of the present invention is to disclose and provide a vibratable facial mask wherein vibratory units embedded in a soft, foamlike material are powered by batteries which may be rechargeable in the mask.

A still further object of the present invention is to disclose and provide a vibratory facial mask including means to hold and retain the mask on the face of the person being treated and wherein such holding means includes a band passing over the back of the neck of the wearer wherein said band carries a vibratable unit for treating back skin portions of the person.

Various other objects and advantages of the present invention will be readily apparent from the following description of the drawings in which an exemplary embodiment of the present invention is shown.

IN THE DRAWINGS

FIG. 1 is a side elevational view of a vibratory mask device embodying the invention, the device being shown as worn by a user;
FIG. 2 is a front view of FIG. 1;
FIG. 3 is a back view of FIG. 1;
FIG. 4 is a sectional view taken in a vertical plane bisecting the device shown in FIG. 1;
FIG. 5 is a transverse fragmentary sectional view taken in the plane indicated by the line V-V of FIG. 4; and
FIG. 6 is a schematic diagram of the vibratory actuating means used in the device shown in FIG. 1.

Referring first to FIG. 1, a vibratory mask device embodying this invention is illustrated which includes a mask body means 12 of generally U-shape and held in position on the face of a person being treated by holding means 14 which may comprise a suitable strap adapted to pass around the back of the neck of the wearer, and also a top strap means 15 which may pass over the top of the head of the wearer. The body means 12 carries a plurality of vibratory units 16 which may be driven by suitable batteries 17 and variously actuated by a switch means 18. The shape of the mask body means 12 may generally correspond to the configuration of a human face and my adjust itself to facial areas of the wearer as described hereafter.

Mask body means 12 comprises an outer thin relatively hard support shell 20 made of suitable plastic material and having a smooth preferably glossy surface to minimize soiling thereof. The support shell 20 is of generally U-shaped configuration and includes a bottom chin portion 21 which extends underneath a chin and which extends upwardly and over the front part of the chin approximately to the lower lip area. Extending upwardly from chin portion 21 are spaced side body portions 22 which generally cover a cheek or side facial area. Side body portions 22 include a front edge section 23 which sweeps upwardly and slightly rearwardly so as to pass the nose and eye of a wearer and which may then terminate at 24 opposite a head temple portion. Side portion 22 extends rearwardly to a back edge 25 which may be located adjacent the forward portion of an ear and which passes behind a jaw portion of a wearer and then smoothly merges with rear edge 26 of the chin portion 21. The edge sections 23 of each side portion provide a forward edge section 27, such edge sections 23 and 27 being formed by a rearwardly extending lip or flange 28 which may serve as a retaining wall for resilient soft foam material which is contained within support shell 20.

The mask body means 12 also includes a relatively soft, thick, foamlike, plastic material 30 of selected plastic material which is cast in support shell 20 by suitable known molding and casting methods. The outer surface of foam material 30 adheres to and is bonded to the inner surface of support shell 20. The exposed face contacting surface 31 of material 30 extends from the edge of flange 28 to back edges of the shell with a thickness which is relatively uniform throughout the mask. The exposed surface 31 is preferably smooth and skin-like and is impervious to liquids, creams, or various facial and cosmetic preparations which might be applied to the face of a person using this device and thus transferred by contact to surface 31.

An example of a suitable plastic material for use in this device may comprise a silastic rubberized plastic, although other materials having the following desirable characteristics may be employed. It is desirable that the soft, foamlike, plastic material which will be in direct contact with skin facial areas of a user should be nontoxic, nonallergic and nonreactive to facial skin and oils. In order that the mask body may be maintained in a sanitary, and if desired, sterile condition, plastic material 30 as well as shell 20 should include characteristics
also imparts vibrations to a portion of the body where fleshy deposits may accumulate.

It should be noted that the manner in which the side portions 22 and chin portion 20 are joined together provides spaced lines about which side portions 22 may be adjusted so that the side portions may be spread apart for a person having a facial width greater than normal. Similarly, the top head strap 15 may be adjusted so as to move side portions 22 more closely together to adjust for relatively narrow facial configurations.

In addition to overall adjustability of side portions 22, the softness and resiliency of the foam material 30 carried by shell 20 permits facial skin areas to be subjected to pressure by the soft material 30 so that such surface 31 of the foam material may adapt itself to the general facial contour of the user. Thus, an effective vibratory effect is transmitted over virtually all of facial areas in contact with the surface 31.

It will be readily apparent that various modifications and changes may be made in the vibratable facial mask described above which come within the spirit of this invention and also such changes and modifications coming within the scope of the appended claims are embraced thereby.

I claim:

1. A facial vibratory mask device comprising:
a mask body means of generally U-shape having side body portions adapted to cover and contact side facial areas and a chin body portion adapted to extend beneath and contact chin facial areas;
said mask body means including an outer thin support shell configured to generally correspond to chin and side facial portions; and
a soft thick resilient foam material contained within such shell and having smooth impervious surfaces for contacting facial skin areas;
vibratory means embedded in said foam material for imparting vibratory pulses through said material to said facial areas; and
means for holding said mask body means with said smooth surfaces in contact with said facial areas.

2. A mask device as stated in claim 1 wherein said vibratory means includes a vibratory unit in each side and chin portion.

3. A mask device as stated in claim 2 wherein said vibratory unit includes a motor having an eccentric and enclosed in a casing.

4. A mask device as stated in claim 1 wherein said holding means includes a strap adapted to extend back of the neck, and a vibrating unit carried by said strap for imparting vibrations to areas at the back of the neck.

5. A mask device as stated in claim 1 wherein said side portions are yieldably connected to said chin portion and adapted to accommodate faces of different width.

6. A mask device as stated in claim 1 including a battery source embedded and contained within said foam material for said vibratory means.

7. A mask device as stated in claim 6 including a battery charging unit embedded in said foam material and connected to said battery source.

8. A vibratory device for use on a selected body surface area comprising:
a housing means including an outer thin support shell having at least one open side; and
a soft, thick, resilient foam material contained within such shell and extending beyond said open side and having smooth impervious surfaces for contacting body areas;
vibratory means embedded in said foam material for imparting vibratory pulses through said foam material to said body areas; and
means for holding said body means with said smooth surfaces in contact with said body areas for transmitting vibratory impulses thereto.

9. A vibratory device as stated in claim 8 wherein said vibratory means includes a vibratory unit embedded within said foam material; and a battery source embedded and contained within said foam material and connected to said vibratable unit for energizing the same.